CLAIMS

1.- S-nitrosothiols derivatives of penicillamine or glutathione, and its pharmaceutically acceptable5 salts, which correspond to following general formula(I)

$$\begin{array}{c}
A \\
SNO \\
R^1 \\
N \\
H
\end{array}$$

$$\begin{array}{c}
R^2 \\
\end{array}$$

$$\begin{array}{c}
A \\
C
\end{array}$$

in which:

A and B are phenyl groups or together form the rest $-CH_2-Q-CH_2-$ constituting a ring of six units in which Q represents an atom of oxygen, of sulfur, or a group $N-R^3$, in which R^3 is hydrogen or an alkyl group C_1-C_4 ;

 R^1 is an acyl rest, which may be an aliphatic acyl group $C_1 - C_5$ or a rest of glutamic acid bound via its non amino acid carboxyl;

R² is a hydroxyl group or a glycine rest bound via a peptide bond;

with the proviso that if R^1 is an aliphatic acyl rest then R^2 is a hydroxyl group, and if R^1 a rest of glutamic acid then R^2 is a glycine rest.

2.- S-nitrosothiols of claim 1, which corresponds to following general formula (II)

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in which A and B have the values mentioned above and R 4 is an alkyl group $C_1\text{-}C_4$.

3.- The compound of any of the claims 1 or 2, N-acetyl-2-amino-2-[4-(4-S-nitrosomercaptotetrahydropyran)] acetic acid (1).

4.- The compound of any of the claims 1 or 2,

N-acetyl-2-amino-2-[4-(4-S-nitrosomercapto-1methylpiperi-din)]acetic acid (2).

5.- The compound of any of the claims 1 or 2, N-acetyl-2-amino-3-benzyl-3-S-nitrosomercapto-4-phenyl-butanoic acid $(\underline{3})$.

6.- S-nitrosothiols of claim 1, which corre-20 sponds to following general formula (III)

in which A and B have the values mentioned above.

7. The compound of any of claims 1 or 6, N[N- γ -5 L-glutamyl-2-amino-2-(4-(4-S-

nitrosomercapto)tetrahydropyr-an))acetyl]-glycine ($\underline{4}$).

8.- The compound of any of claims 1 or 6, N[N- γ -L-glutamyl-2-amino-2-(4-(4-S-nitrosomercapto-1-methylpipe-ridin))acetyl]-glycine ($\underline{5}$).

9.- The compound of any of claims 1 or 6, N[N- γ -L-glutamyl-2-amino-3-benzyl-3-(S-nitrosomercapto)-4-phenylbutanoyl]-glycine ($\underline{6}$).

$$\begin{array}{c} C_{6}H_{5} \\ C_{6}H_{5} \\ O \\ NH_{2} \\ O \\ NH_{2} \\ O \\ \underline{6} \\ O \\ \underline{6} \\ \end{array}$$

- 10.- The use of the S-nitrosothiols of any of the claims above for the manufacture of a medicament for the treatment of circulatory dysfunctions.
 - 11.- The use of claim 10 for the manufacture of a medicament for the treatment of dysfunctions of the cardiovascular system.

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